

IN THE CLAIMS

The following is a complete listing of the claims, and replaces all earlier versions and listings.

1. (Currently Amended) An information processing method of controlling access to computer resource(s) managed by an operating system, such as a file, network, storage device, display screen, or external device, comprising:

~~a trap step of trapping an operation request from a process or operating system for the computer resource before access to the computer resource;~~

an interception step of intercepting, between a process and an operating system, an operation request for a computer resource managed by the operating system, which is issued toward the operating system from the process;

a determination step of determining whether an access right for the computer resource designated by the operation request ~~trapped~~ intercepted in the trap said interception step is present;

a processing step of, if it is determined in ~~[[the]]~~ said determination step that the access right is present, transferring the operation request to the operating system and returning a result from the operating system to the ~~request source~~ process; and

a denial step of denying the operation request if it is determined in ~~[[the]]~~ said determination step that no access right is present.

2. (Canceled)

3. (Currently Amended) The method according to claim 1, wherein ~~in the~~ said determination step, ~~it is determined~~ includes determining whether the access right is present by looking up an access right management table containing resource designation information that designates a specific computer resource, condition information under which the access right is validated, and access right information that designates an access right that is extended but not defined in an existing environment.

4. (Currently Amended) The method according to claim 1, wherein ~~in the~~ said determination step, ~~it is determined~~ includes determining whether the access right is present by looking up access right information that is described in the computer resource to designate an access right that is extended but not defined in an existing environment.

5. (Currently Amended) The method according to claim 1, wherein ~~in the~~ said determination step, ~~it is determined~~ includes determining whether the access right is present by determining whether the access right can be acquired.

6. (Original) The method according to claim 3 or 4, wherein the access right information contains information that designates at least one of a right to move to another medium, a right to copy to another medium, a right to print, a right to write to a shared memory, a right to capture a screen, and a right to restrict use processes.

7. (Currently Amended) The method according to claim 1, wherein in [[the]] said denial step, an access denial error message is returned to the process request source ~~process~~ without any access to the requested computer resource.

8. (Currently Amended) The method according to claim 1, wherein in [[the]] said denial step, a successful access message is returned to the ~~request source~~ process without any access to the requested computer resource.

9. (Currently Amended) The method according to claim 1, wherein in [[the]] said denial step, the operation request is converted into an operation request for a dummy computer resource and transferred to the operating system, and a result from the operating system is returned to the ~~request source~~ process.

10. (Currently Amended) An information processing apparatus for controlling access to computer resource(s) managed by an operating system, such as a file, network, storage device, display screen, or external device, comprising:

~~trap means for trapping an operation request from a process or operating system for the computer resource before access to the computer resource;~~

interception means for intercepting, between a process and an operating system, an operation request for a computer resource managed by the operating system, which is issued toward the operating system from the process;

determination means for determining whether an access right for the computer resource designated by the operation request ~~trapped~~ intercepted by said ~~trap~~ interception means is present;

processing means for, if it is determined by said determination means that the access right is present, transferring the operation request to the operating system and returning a result from the operating system to the ~~request source~~ process; and

denial means for denying the operation request if it is determined by said determination means that no access right is present.

11. (Canceled)

12. (Original) The apparatus according to claim 10, wherein said determination means determines whether the access right is present by looking up an access right management table containing resource designation information that designates a specific computer resource, condition information under which the access right is validated, and access right information that designates an access right that is extended but not defined in an existing environment.

13. (Original) The apparatus according to claim 10, wherein said determination means determines whether the access right is present by looking up access right information that is described in the computer resource to designate an access right that is extended but not defined in an existing environment.

14. (Original) The apparatus according to claim 10, wherein said determination means determines whether the access right is present by determining whether the access right can be acquired.

15. (Original) The apparatus according to claim 12 or 13, wherein the access right information contains information that designates at least one of a right to move to another medium, a right to copy to another medium, a right to print, a right to write to a shared memory, a right to capture a screen, and a right to restrict use processes.

16. (Currently Amended) The apparatus according to claim 10, wherein said denial means returns an access denial error message to the ~~request source~~ process without any access to the requested computer resource.

17. (Currently Amended) The apparatus according to claim 10, wherein said denial means returns a successful access message to the ~~request source~~ process without any access to the requested computer resource.

18. (Currently Amended) The apparatus according to claim 10, wherein said denial means converts the operation request into an operation request for a dummy computer resource, transfers the operation request to the operating system, and returns a result from the operating system to the ~~request source~~ process.

19. (Currently Amended) A storage medium which stores program codes for controlling access to computer resource(s) such as a file, network, storage device, display screen, or external device, comprising:

~~a program code of a trap step of trapping an operation request from a process or operating system for the computer resource before access to the computer resource;~~

program code of an interception step of intercepting, between a process and an operating system, an operation request for a computer resource managed by the operating system, which is issued toward the operating system from the process;

[[a]] program code of a determination step of determining whether an access right for the computer resource designated by the operation request ~~trapped~~ intercepted in the trap said interception step is present;

[[a]] program code of a processing step of, if it is determined in [[the]] said determination step that the access right is present, transferring the operation request to the operating system and returning a result from the operating system to the ~~request source~~ process; and

[[a]] program code of a denial step of denying the operation request if it is determined in [[the]] said determination step that no access right is present.

20. (Canceled)

21. (Currently Amended) The medium according to claim 19, wherein in [[the]] said determination step, it is determined whether the access right is present by looking up an access right management table containing resource designation information that designates a specific computer resource, condition information under which the access right is validated, and access right information that designates an access right that is extended but not defined in an existing environment.

22. (Currently Amended) The medium according to claim 19, wherein in [[the]] said determination step, it is determined whether the access right is present by looking up access right information that is described in the computer resource to designate an access right that is extended but not defined in an existing environment.

23. (Currently Amended) The medium according to claim 19, wherein in [[the]] said determination step, it is determined whether the access right is present by determining whether the access right can be acquired.

24. (Original) The medium according to claim 21 or 22, wherein the access right information contains information that designates at least one of a right to move to another medium, a right to copy to another medium, a right to print, a right to write to a shared memory, a right to capture a screen, and a right to restrict use processes.

25. (Currently Amended) The medium according to claim 19, wherein in [[the]] said denial step, an access denial error message is returned to the ~~request source~~ process without any access to the requested computer resource.

26. (Currently Amended) The medium according to claim 19, wherein in [[the]] said denial step, a successful access message is returned to the ~~request source~~ process without any access to the requested computer resource.

27. (Currently Amended) The medium according to claim 19, wherein in [[the]] said denial step, the operation request is converted into an operation request for a dummy computer resource and transferred to the operating system, and a result from the operating system is returned to the ~~request source~~ process.

28. (Currently Amended) A program for causing a computer to control access to computer resource(s) such as a file, network, storage device, display screen, or external device, comprising:

~~a program code of a trap step of trapping an operation request from a process or operating system for the computer resource before access to the computer resource;~~

program code of an interception step of intercepting, between a process and an operating system, an operation request for a computer resource managed by the operating system, which is issued toward the operating system from the process;

[[a]] program code of a determination step of determining whether an access right for the computer resource designated by the operation request ~~trapped~~ intercepted in ~~the trap~~ said interception step is present;

[[a]] program code of a processing step of, if it is determined in [[the]] said determination step that the access right is present, transferring the operation request to the operating system and returning a result from the operating system to the ~~request source~~ process; and

[[a]] program code of a denial step of denying the operation request if it is determined in [[the]] said determination step that no access right is present.

29. (Canceled)

30. (Currently Amended) The program according to claim 28, wherein if it is determined in [[the]] said determination step that no access right is present, and access is denied in [[the]] said denial step, an access right is permitted by charging.

31. (Original) The program according to claim 28, wherein the computer resource includes contents of a Web cast, digital broadcasting, and music distribution.

32. (Currently Amended) An information processing system constituted by connecting first and second terminals through a communication network, wherein

the first terminal comprises:

~~trap means for trapping an operation request from a process or operating system for computer resource(s) in the second terminal before access to the computer resource, and~~

interception means for intercepting, between a process and operating system, an operation request for a computer resource managed by the second terminal, which is issued toward the operating system from the process, and

the second terminal comprises:

determination means for determining whether an access right for the computer resource designated by the operation request ~~trapped~~ intercepted by said ~~[[trap]]~~ interception means is present;

processing means for, if it is determined by said determination means that the access right is present, transferring the operation request to the operating system in the first terminal and returning a result from the operating system to the process in the first terminal ~~request source process~~; and

denial means for denying the operation request if it is determined by said determination means that no access right is present.

33. (Currently Amended) A control method for an information processing system constituted by connecting first and second terminals through a communication network, comprising:

~~a trap step of, in the first terminal, trapping an operation request from a process or operating system for computer resource(s) in the second terminal before access to the computer resource;~~

an interception step of intercepting, between a process and operating system, an operation request for a computer resource managed by the second terminal, which is issued toward the operating system from the process, and

a determination step of determining, in the second terminal, whether an access right for the computer resource, designated by the operation request ~~trapped~~ intercepted in the trap said interception step is present;

a processing step of, if it is determined in ~~[[the]]~~ said determination step that the access right is present, transferring the operation request to the operating system in the first terminal and returning a result from the operating system to the ~~request source~~ process in the first terminal; and

a denial step of denying the operation request if it is determined in ~~[[the]]~~ said determination step that no access right is present.

34. (Currently Amended) A storage medium which stores program codes of control for an information processing system constituted by connecting first and second terminals through a communication network, comprising:

~~a program code of a trap step of, in the first terminal, trapping an operation request from a process or operating system for computer resource(s) in the second terminal before access to the computer resource;~~

program code of an interception step of intercepting, between a process and operating system, an operation request for a computer resource managed by the second terminal, which is issued toward the operating system from the process, and

[[a]] program code of a determination step of determining, in the second terminal, whether an access right for the computer resource designated by the operation request ~~trapped intercepted in the trap~~ said interception step is present;

[[a]] program code of a processing step of, if it is determined in [[the]] said determination step that the access right is present, transferring the operation request to the operating system in the first terminal and returning a result from the operating system to the ~~request source~~ process in the first terminal; and

[[a]] program code of a denial step of denying the operation request if it is determined in [[the]] said determination step that no access right is present.

35. (Currently Amended) A program which causes a computer to control an information processing system constituted by connecting first and second terminals through a communication network, comprising:

~~a program code of a trap step of, in the first terminal, trapping an operation request from a process or operating system for computer resource(s) in the second terminal before access to the computer resource;~~

program code of an interception step of intercepting, between a process and operating system, an operation request for a computer resource managed by the second terminal, which is issued toward the operating system from the process, and

[[a]] program code of a determination step of determining, in the second terminal, whether an access right for the computer resource designated by the operation request ~~trapped~~ intercepted in the ~~trap~~ said interception step is present;

[[a]] program code of a processing step of, if it is determined in [[the]] said determination step that the access right is present, transferring the operation request to the operating system in the first terminal and returning a result from the operating system to the ~~request source~~ process in the first terminal; and

[[a]] program code of a denial step of denying the operation request if it is determined in [[the]] said determination step that no access right is present.

36. (Currently Amended) An information processing apparatus connected to another terminal through a communication network, comprising:

~~trap means for trapping an operation request from a process or operating system for computer resource(s) in the other terminal before access to the computer resource; and~~

interception means for intercepting, between a process and an operating system, an operation request for a computer resource managed by the other terminal, which is issued toward the operation system from the process, and

reception means for receiving a reply to the operation request.

37. (Currently Amended) An information processing apparatus connected to another terminal through a communication network, comprising:

determination means for determining whether an access right is present for computer resource(s) in ~~[[the]]~~ said information processing apparatus, which is designated by an operation request for the computer resource ~~trapped~~ intercepted by the other terminal before access to the computer resource;

processing means for, if it is determined by said determination means that the access right is present, transferring the operation request to operating system in the other terminal and returning a result to a process in the other terminal ~~a request source process~~; and

denial means for denying the operation request if it is determined by said determination means that no access right is present.

38. (Currently Amended) An information processing method for an information processing apparatus connected to another terminal through a communication network, comprising:

~~a trap step of trapping an operation request from a process or operating system for computer resource(s) in the other terminal before access to the computer resource; and~~

an interception step of intercepting, between a process and an operating system, an operation request for a computer resource managed by the other terminal, which is issued toward the operation system from the process, and

a reception step of receiving a reply to the operation request.

39. (Currently Amended) An information processing method for an information processing apparatus connected to another terminal through a communication network, comprising:

a determination step of determining whether an access right is present for computer resource(s) in the information processing apparatus, which is designated by an operation request for the computer resource ~~trapped~~ intercepted by the other terminal before access to the computer resource;

a processing step of, if it is determined in ~~[[the]]~~ said determination step that the access right is present, transferring the operation request to an operating system in the other terminal and returning a result from the operating system to a ~~request source process~~ in the other terminal; and

a denial step of denying the operation request if it is determined in ~~[[the]]~~ said determination step that no access right is present.

40. (Currently Amended) A storage medium which stores program codes of information processing of an information processing apparatus connected to another terminal through a communication network, comprising:

~~a program code of a trap step of trapping an operation request from a process or operating system for computer resource(s) in the other terminal before access to the computer resource; and~~

program code of an interception step of intercepting, between a process and an operating system, an operation request for a computer resource managed by the other terminal, which is issued toward the operation system from the process, and

[[a]] program code of a reception step of receiving a reply to the operation request.

41. (Currently Amended) A storage medium which stores program codes of information processing of an information processing apparatus connected to another terminal through a communication network, comprising:

[[a]] program code of a determination step of determining whether an access right is present for computer resource(s) in the information processing apparatus, which is designated by an operation request for the computer resource ~~trapped~~ intercepted by the other terminal before access to the computer resource;

[[a]] program code of a processing step of, if it is determined in [[the]] said determination step that the access right is present, transferring the operation request to an operating system in the other terminal and returning a result from the operating system to a ~~request source~~ process in the other terminal; and

[[a]] program code of a denial step of denying the operation request if it is determined in [[the]] said determination step that no access right is present.

42. (Currently Amended) A program which causes a computer to execute information processing of an information processing apparatus connected to another terminal through a communication network, comprising:

~~a program code of a trap step of trapping an operation request from a process or operating system for computer resource(s) in the other terminal before access to the computer resource; and~~

program code of an interception step of intercepting, between a process and an operating system, an operation request for a computer resource managed by the other terminal, which is issued toward the operation system from the process, and

~~[[a]] program code of a reception step of receiving a reply to the operation request.~~

43. (Currently Amended) A program which causes a computer to execute information processing of an information processing apparatus connected to another terminal through a communication network, comprising:

~~[[a]] program code of a determination step of determining whether an access right is present for computer resource(s) in the information processing apparatus, which is designated by an operation request for the computer resource ~~trapped~~ intercepted by the other terminal before access to the computer resource;~~

~~[[a]] program code of a processing step of, if it is determined in [[the]] said determination step that the access right is present, transferring the operation~~

request to an operating system in the other terminal and returning a result from the operating system to a ~~request source~~ process in the other terminal; and

[[a]] program code of a denial step of denying the operation request if it is determined in [[the]] said determination step that no access right is present.

44.-56. (Canceled)